

### Abstract of the Disclosure

One exemplary embodiment includes a semi-conductor device. The semi-conductor device can include a channel including that includes one or more compounds of the formula  $A_xB_xC_xO_x$ , wherein each A is selected from the group of Zn, Cd, each B is selected from the group of Ga, In, each C is selected from the group Ge, Sn, Pb, each O is atomic oxygen, each x is independently a non-zero integer, and each of A, B, and C are different.